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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,410	10/07/2005	Takehito Nakayama	1217-052834	2397

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EXAMINER

MCCLELLAND, KIMBERLY KEIL

ART UNIT	PAPER NUMBER
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1734

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	05/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/552,410

Applicant(s)

NAKAYAMA, TAKEHITO

Examiner

Kimberly K. McClelland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-7, 12 and 14-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-11, 13 and 22-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>8/4/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II, claims 8-11, 13, and 22-26 in the reply filed on 2/27/07 is acknowledged. The traversal is on the ground(s) that the references cited do not negate the patentability of the current claims. This is not found persuasive because applicant has failed to identify any common special technical feature.
2. Applicant's arguments are not clear as to the supposed special technical features of any of the three inventions.
3. Applicant argues Group I includes special technical feature of a tape with a non-sticky surface. However, this feature is not disclosed in Group II or Group III, and cannot be a common special technical feature. Furthermore, applicant points to the reference numeral 3 of JP 6100842 as not meeting the requirements of a nonsticky surface. Examiner has included a more detailed machine translation of JP '842 which discloses reference numeral 3 may be numerous materials including non-sticky materials such as metal, paper, and polyvinyl chloride (See paragraph 0019). Consequently, no special technical feature exists.
4. With respect to Groups II and III, applicant argues the common special technical feature is sticking a protective tape to a wafer. However, sticking protective tape to a wafer is well known in the art, as shown by the cited references, and is not inventive. In addition, independent claims 8 and 12 do not disclose sticking a protective tape to a

wafer. Furthermore, materials acted on in an apparatus are not given patentable weight. Consequently, no common special technical feature has been found to exist.

The requirement is still deemed proper and is therefore made FINAL.

5. Claims 1-7, 12, 14-21, and 27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected inventions, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 2/27/07.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 9 recites the limitation "the wind-up direction" in lines 8-9. There is insufficient antecedent basis for this limitation in the claim. It is unclear which direction is the "wind-up direction". Clarification is required. For the purposes of examination, examiner assumes the direction on the opposite side of the support film from the wind-up roll is the opposite of the wind-up direction.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 8-10, 13, and 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,328,546 to Brady et al. in view of U.S. Patent No. 6,803,320 to Yamamoto and U.S. Patent No. 6,715,524 to Chen et al.

11. With respect to claim 8, Brady et al. discloses a photo resist film application mechanism, including a mounting table (74) on which the adherend (72) is mounted; a fixing roll (46) for attaching and fixing a long support film to the member, the support film (40) having a sticky and removable surface to which the tape is attached; the apparatus being constructed such that: the support film (40) is arranged above the mounting table (74) so that the tape is included in a frame of the frame member; the fixing roll (46) is caused to press the support film to fix the support film to the member; and the support film (40) is released from the tape (column 5, lines 3-44; See Figure 5). However, Brady et al. does not specifically disclose a frame member provided to include an adherend-mounting surface of the mounting table or a sticking roll for sticking the tape to the adherend the sticking roll is caused to press the support film in the frame of the frame member to stick the tape to the adherend.

12. Yamamoto discloses a protective tape applying apparatus, including a frame member (F) provided to include an adherend-mounting surface of the mounting table

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(column 6, lines 20-30; See Figure 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the frame member of Yamamoto with the mounting table disclosed by Brady et al. The motivation would have been to effectively hold and contain the adherend during the laminating and fixing process.

13. Chen et al. discloses a film removing system, including it is known in the prior art to use a sticking roll (24) for sticking the tape (3/4) to the adherend (36) the sticking roll (24) is caused to press the support film (1) to stick the tape (3/4) to the adherend (36; See Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the sticking roll taught by Chen et al. with the fixing roll of Brady et al. The motivation would have been to provide sufficient and even pressure during the lamination step.

14. As to claim 9, Chen et al. discloses a wind-up roll (42) for the support film (40); and a fixed end (41) of the support film; the apparatus being constructed such that: the fixing roll (46) is moved toward the member while pressing the support film (40) between the wind-up roll (42) and the fixed end (41), thereby transferring the tape attached to the support film (40) between the wind-up roll (42) and the fixing roll (42) in a direction opposite to the wind-up direction such that the tape is included in the frame of the member (See Figure 5); and the support film (40) is wound on the wind-up roll (42). However, Brady et al. does not specifically disclose a frame member or the fixing roll is caused to press the support film to fix the support film to the frame member; the

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sticking roll is caused to press the support film in the frame of the frame member to stick the tape to the adherend; and the fixing roll is moved away from the frame member.

15. Yamamoto discloses a protective tape applying apparatus, including a frame member (F) provided to include an adherend-mounting surface of the mounting table (column 6, lines 20-30; See Figure 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the frame member of Yamamoto with the mounting table disclosed by Brady et al. The motivation would have been to effectively hold and contain the adherend during the laminating and fixing process.

16. Chen et al. discloses a film removing system, including the fixing roll (24) is caused to press the support film (1) to fix the support film to the member; the sticking roll (24) is caused to press the support film in the member to stick the tape (3/4) to the adherend (36); and the fixing roll (24) is moved away from the member (12; See Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the sticking roll taught by Chen et al. with the fixing roll of Brady et al. The motivation would have been to provide sufficient and even pressure during the lamination step.

The phrase, "the fixing roll is moved away from the frame member and simultaneously the support film is released from the tape" is considered a method step, and is not found to be a positive recitation of any structural elements of the currently claimed apparatus. The examiner would like to note that while features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must

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be distinguished from the prior art in terms of structure rather than function. In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); “[A]pparatus claims cover what a device is, not what a device does.” Hewlett-Packard Co. v. Bausch & Lomb Inc., 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original). A claim containing a “recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus” if the prior art apparatus teaches all the structural limitations of the claim. Ex parte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987). See MPEP § 2114.

17. As to claim 10, Brady et al. discloses clamping the support film across the width, the apparatus being constructed such that: the support film (40) is clamped at longer edge portions thereof with the clamping member (84) and the tape is arranged such that the tape is included in the member; the fixing roll (46) is caused to press the support film (40) to fix the support film (40) to the member; and the support film (40) is released from the tape by relatively moving the clamping member (86; column 6, lines 3-10; See Figure 6). However, Brady et al. does not specifically disclose a frame member or the sticking roll is caused to press the support film in the frame of the frame member to stick the tape to the adherend.

18. Yamamoto discloses a protective tape applying apparatus, including a frame member (F) provided to include an adherend-mounting surface of the mounting table (column 6, lines 20-30; See Figure 6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the frame member of

Yamamoto with the mounting table disclosed by Brady et al. The motivation would have been to effectively hold and contain the adherend during the laminating and fixing process.

19. Chen et al. discloses a film removing system, including the sticking roll (24) is caused to press the support film (1) to stick the tape (3/4) to the adherend (36; See Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the sticking roll taught by Chen et al. with the fixing roll of Brady et al. The motivation would have been to provide sufficient and even pressure during the lamination step.

20. As to claims 13 and 24-25, expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). However, Brady discloses a semiconductor wafer (72) and a protective tape (16).

21. Claims 11, 22-23, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,328,546 to Brady et al. in view of U.S. Patent No. 6,803,320 to Yamamoto and U.S. Patent No. 6,715,524 to Chen et al. as applied to claims 8-10, 13, and 24-25 above, and further in view of U.S. Patent No. 6,080,263 to Saito et al.

22. With respect to claims 11 and 22-23, Brady et al. discloses a photo resist film application mechanism, including accurately positioning the film over the semiconductor wafer by controlling the transport web (column 2, lines 34-56). However, Brady et al.

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does not specifically disclose aligning means capable of relatively moving the frame member to which the support film is attached and the mounting table on which the adherend is mounted to perform alignment of the tape in the frame of the frame member with the adherend.

23. Saito et al. discloses an apparatus for applying protective film to a semiconductor wafer, including aligning means capable of relatively moving the frame member to which the support film is attached and the mounting table on which the adherend is mounted to perform alignment of the tape in the frame of the frame member with the adherend (See Abstract). It would have been obvious to one of ordinary skill in the arts at the time the invention was made to combine the aligning means taught by Saito et al. with the mounting table disclosed by Brady et al. The motivation would have been to accurately place the protective film during the lamination steps and ensure effective coverage of the wafer.

24. As to claim 26, expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). However, Brady discloses a semiconductor wafer (72) and a protective tape (16).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patent No. 5,310,442 to Ametani (See Figures 3-4) and U.S. Patent No. 5,891,298 to Kuroda et al. disclose similar devices for removing protective tapes. It

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is noted that these references have a different purpose than applicant's current invention. However, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. Exparte Masham, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly K. McClelland whose telephone number is (571) 272-2372. The examiner can normally be reached on 8:00 a.m.-5 p.m. Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris A. Fiorilla can be reached on (571)272-1187. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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